Finite Elements in Analysis and Design 10 (1992) 353–354
Elsevier

Contents Volume 10

Volume 10, Number 1, October 1991

K. PÄRSSINEN and A. LEHTOVAARA
Finite element method for the calculation of nominal pressure distribution between ski and track 1
J.G. ORBISON, R.H. PETEREC, J.A. CARHART and T.P. RICH
Specimen and automated test method development for investigation of fatigue crack initiation 9
M. FAURI and P. SONATO
Magnetostatic shielding design for electronic apparatus in fusion experiments 27
M. IMREGUN and W.J. VISSER
Multi-stage beam modelling of turbomachinery blades 41
D.K. EBERLINE, T.J. WIPF and L.F. GREIMANN
Finite element idealization of nonlinear structural response to tornado wind loads 59
H.S. GOPALAKRISHNA and E. DONALDSON
Practical reliability analysis using a general purpose finite element program 75
K.E. ROUCH, T.H. McMAINS, R.W. STEPHENSON and M.F. EMERICK
Modeling of complex rotor systems by combining rotor and substructure models 89

Volume 10, Number 2, November 1991

A.J. KURDILA, J.L. JUNKINS and R.G. MENON
Linear substructure synthesis via Lyapunov stable penalty functions 101
G.J. HUH and B.M. KWAK
Constrained variational approach for dynamic analysis of elastic contact problems 125
J.-C. LUO and M.B. FRIEDMAN
A formulation of the finite element method by implicit decomposition 137
G.J. SIMITSES, Y. SONG and I. SHEINMAN
Elastoviscoplastic snap-through behavior of shallow arches subjected to thermomechanical loads 151
M.E. BOTKIN
Shape design modeling using fully automatic three-dimensional mesh generation 165

Conference Announcement 183

Volume 10, Number 3, December 1991

Special Issue: Robert J. Melosh Medal Competition

R.J. MELOSH
An algorithm to establish FEA zero grid-interval structural responses 187
L. CHAO
Normal gradients of velocity formulation versus surface traction formulation in velocity–pressure integrated FEM 199
H.S. YU
A rational displacement interpolation function for axisymmetric finite element analysis of nearly incompressible materials 205
P. PAPADOPOULOS and R.L. TAYLOR
An analysis of inelastic Reissner–Mindlin plates 221
P. BEAUCHEMIN
An efficient finite element incompressible Navier–Stokes solver that approximates nonlinear terms with finite differences 235

K.Y. CHOE and K.A. HOLSAPPLE
The Taylor–Galerkin discontinuous finite element method—An explicit scheme for nonlinear hyperbolic conservation laws 243
J.B. SAINZ and A. PEÑA
Application of extrapolation processes to the finite element method 267

Call for Papers 281

Volume 10, Number 4, February 1922

M. SUBBIAH, A.M. SHARAN and C. DHANRAJ
New methods for obtaining the matrix of direction cosines in three-dimensional structures 283
S.S. LEE and B.M. KWAK
Shape sensitivity analysis of thin-shell structures 293
S.H. NGUYEN
A higher-order finite element scheme for incompressible lubrication calculations 307
N.J. SALOMON and R.A. OLDHAM
Analysis for design of spoked bicycle wheels 319
S. RAMACHANDRAN, T. NAGARAJAN and N. SIVA PRASAD
A finite element approach to the design and dynamic analysis of platform type robot manipulators 335

Author Index Volume 10 351
Contents Volume 10 353

U·M·I

SHOULD READ VOLUME 10, NUMBER 4,
FEBRUARY 1992.